

Mono PERC 210mm 100 Cells

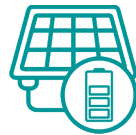
MS(485-510)MB-50H Silver Frame

485/490/495/500/505/510 WP



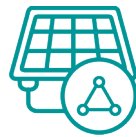
High customer value

- Lower LCOE (Levelized Cost Of Energy), reduced BOS (Balance Of System) cost, shorter payback time
- Lower guaranteed first year and annual degradation
- Designed for compatibility with existing mainstream system components
- Higher return on Investment



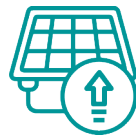
High energy yield

- Excellent IAM (Incident Angle Modifier) and low irradiation performance, validated by 3rd party certifications
- The unique design provides optimized energy production under inter-row shading conditions



High reliability

- Minimized micro-cracks with innovative non-destructive cutting technology
- Ensured PID resistance through cell process and module material control
- Resistant to harsh environments such as salt, ammonia, sand, high temperature and high humidity areas
- Mechanical performance up to 5400 Pa positive load and 2400 Pa negative load
- Class-C fire safety test passed



High power up to 510W

- Large area cells based on 210mm silicon wafers and 1/2-cut cell technology
- Up to 21.3% module efficiency with high density interconnect technology
- Multi-busbar technology for better light trapping effect lower series resistance and improved current collection

APPLICATIONS >>



On-grid residential roof-tops



On-grid commercial/ industrial roof-tops



MAXIMUM EFFICIENCY

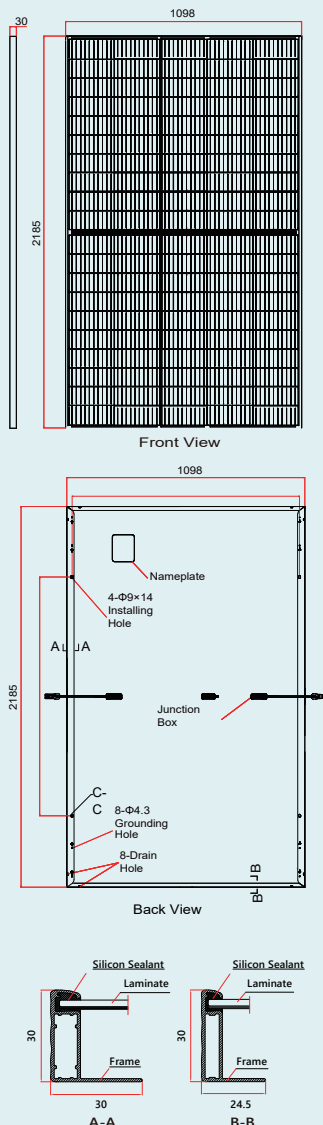
21.3%

POSITIVE POWER TOLERANCE

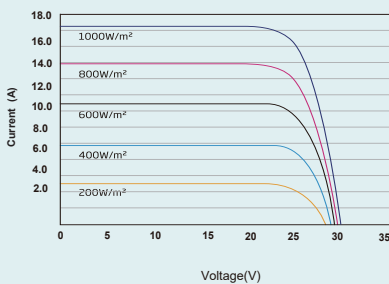
0 ~ +5W



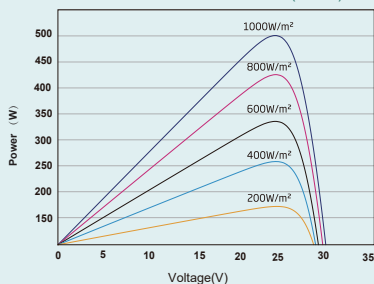
DIMENSIONS OF PV MODULE(mm)



I-V CURVES OF PV MODULE(500W)



P-V CURVES OF PV MODULE(500W)



ELECTRICAL DATA (STC)

Peak Power Watts- P_{MAX} (Wp)*	485	490	495	500	505	510
Power Tolerance- P_{MAX} (W)	0 ~ +5					
Maximum Power Voltage- V_{MPP} (V)	28.2	28.4	28.6	28.8	29.0	29.2
Maximum Power Current- I_{MPP} (A)	17.18	17.25	17.31	17.36	17.42	17.49
Open Circuit Voltage- V_{OC} (V)	33.9	34.1	34.3	34.5	34.7	34.9
Short Circuit Current- I_{SC} (A)	18.31	18.39	18.47	18.55	18.63	18.71
Module Efficiency η_m (%)	20.3	20.5	20.7	20.9	21.1	21.3

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5. *Measuring tolerance: ±3%.

ELECTRICAL DATA (NOCT)

Maximum Power- P_{MAX} (Wp)	368	372	375	379	382	385
Maximum Power Voltage- V_{MPP} (V)	26.2	26.4	26.6	26.8	27.0	27.2
Maximum Power Current- I_{MPP} (A)	14.01	14.05	14.09	14.14	14.17	14.20
Open Circuit Voltage- V_{OC} (V)	31.9	32.1	32.3	32.5	32.7	32.9
Short Circuit Current- I_{SC} (A)	14.75	14.82	14.88	14.95	15.01	15.08

NOCT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s.

MECHANICAL DATA

Solar Cells	Monocrystalline
Cell Orientation	100 cells
Module Dimensions	2185×1098×35 mm (86.02×43.22×1.38 inches)
Weight	26.5 kg
Glass	3.2 mm (0.13 inches), High Transmission, AR Coated Heat Strengthened Glass
Encapsulant Material	EVA
Backsheet	White
Frame	30 mm(1.38 inches) Silver, anodized aluminium alloy
J-Box	IP 68 rated (3 bypass diodes)
Cables	Photovoltaic Technology Cable 4.0mm ² (0.006 inches ²) Portrait: N 280mm/P 280mm(11.2/11.2 inches) Length can be customized
Connector	MC4 Compatible

*Please refer to regional datasheet for specified connector.

TEMPERATURE RATINGS

NOCT(Nominal Operating Cell Temperature)	43°C (±2°C)
Temperature Coefficient of P_{MAX}	- 0.34%/°C
Temperature Coefficient of V_{OC}	- 0.25%/°C
Temperature Coefficient of I_{SC}	0.04%/°C

MAXIMUM RATINGS

Operational Temperature	- 40 ~ +85°C
Maximum System Voltage	1500V DC (IEC)
	1000V DC (IEC)
Max Series Fuse Rating	20A

WARRANTY

- 15 year Product Workmanship Warranty
- 25 year Power Warranty
- 2.5% first year degradation
- 0.5% Annual Power Attenuation

*Please refer to product warranty for details.

PACKAGING CONFIGURATION

- Modules per pallet: 31 pieces
- Modules per 40' container: 620 pieces



CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.

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